#### **Operating Instructions and Replacement Parts List**

GPH400 and GPH550

Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

## MAYNE

#### **DESCRIPTION**

The WAYNE pumps are general use centifugal water pumps.

#### **SAFETY GUIDELINES**

This manual contains information that is very important to know and understand. This information is provided for SAFETY and to PREVENT EQUIPMENT PROBLEMS. To help recognize this information, observe the following symbols.

**A DANGER** 

Indicates an imminently hazardous situation which, if NOT avoided, WILL result in death or serious injury.

**A WARNING** 

Indicates a potentially hazardous situation which, if NOT avoided, COULD result in death or serious injury.

**A** CAUTION

Indicates a potentially hazardous situation which, if NOT avoided, MAY result in minor or moderate injury.

NOTICE

Indicates important information, that if NOT followed, MAY cause damage to equipment.

#### **GENERAL SAFETY INFORMATION**

 Know the pump application, limitations, and potential hazards. Read these rules and instructions carefully. Failure to follow them COULD cause serious injury and/or property damage.

**▲ DANGER** 

NEVER run engine in an enclosed area. Exhaust gases

contain deadly poisonous carbon monoxide, which has no odor or taste.

**A** WARNING

Do NOT use to pump flammable or explosive fluids

such as gasoline, fuel oil, kerosene, etc. Do NOT use in flammable and/or explosive atmospheres. Pump SHOULD only be used with liquids compatible with pump component materials. Failure to follow this warning CAN result in personal injury and/or property damage.

2. Observe all safety precautions for the handling of the fuel.



Do NOT refuel a hot engine. Fuel spilled on a hot engine

COULD result in a fire or explosion Do NOT refuel a running engine.

3. Pump SHOULD be located and SHOULD rest on a level solid foundation. Do NOT suspend pump by means of the discharge pipe.

#### NOTICE

Be sure pump is on secure footing so it doesn't fall over.

- Do NOT use torches or apply excessive heat, fire or flames to this pump as an explosion may result.
- 5. Before working on the unit, insulate the wire from the spark plug, disconnect the spark plug wire and mount it on the grounding clip.

NOTICE

Complete pump and piping system
MUST be protected against below freezing

temperatures. Failure to do so COULD cause serious damage and voids the warranty.

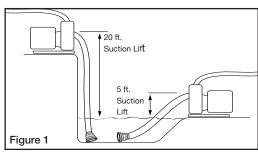
# **Engine Driven Semi-Trash Pump**

- Do NOT run pump dry. Water is required to lubriucate the shaft seal.
- 7. Pumping chemicals or corrosive liquids with this pump may shorten the life of the pump and be hazardous to the operator.
- 8. Personal Safety:
  - a. Wear safety glasses at all times when working with pumps.
  - b. Keep work area clean, uncluttered and properly lighted; replace all unused tools and equipment.
  - c. Keep visitors at a safe distance from the work area.
  - d. Make workshop child-proof with padlocks, master switches, and by removing starter keys.
- 9. ALWAYS use a suction strainer with this pump to filter large material.

#### **APPLICATION**

This pump is designed to be self-priming when installed and operated as specified below.

 The pump SHOULD be placed as close as possible to the liquid being pumped. A pump with 20 foot suction lift will NOT remove water as quickly as a pump with 5 foot suction lift (Figure 1).



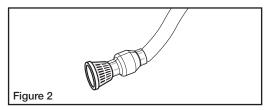
2. Suction hose and fitting must be airtight.



An air leak in the suction line MAY prevent priming of the pump. Use of thread sealant is recommended.

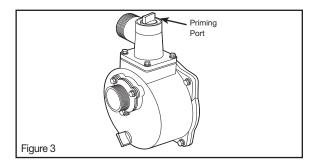
Suction lines must be reinforced hose or rigid pipe. Non-reinforced hose will collapse due to the suction created by the pump and prevent pump from operating.

3. A check valve MUST be used in the suction line to maintain the self-priming capability. If no check valve is used the pump will need to be primed at the start of each operation. For best operation, the check valve should be installed at the intake of the section line. (Figure 2)



#### **APPLICATION (CONTINUED)**

- A suction strainer is required to filter abrasive material
- The discharge hose and fiting should be leak-tight. A leak in the discharge hose will allow water to spray around the worksite, making the site
- 6. Keep all pipes and hose lines as short and straight as possible. Long lengths and curves in the pipes and hose lines will reduce the pressure the pump develops.
- 7. Fill the engine crankcase with oil. Refer to the engine operating manual for the specific grade of oil and amount required.
- Fill the engine fuel tank with gasoline. Refer to the engine operating manual for specific gasoline type that is most efficient for this engine.
- 9. Add water to the priming port on the pump (See Figure 3). Continue adding water until the water level is approximately 3 inches from the top. Install the priming plug. The water in the pump will create the suction that primes the



- 10. Turn fuel valve to "ON" position.
- 11 Move choke lever to "CHOKE" position.
- 12 Move throttle lever to "START" position.
- 13. Pull on engine crank until engine starts, move choke lever to "RUN" position.
- 14. The pump will take several minutes to prime.

#### **PIPING**

Always place the pump as close as possible to the liquid being pumped. Keep all pipe hose lines as short and straight as possible.

**A WARNING** 

Support pump and piping when assembling and after installation. Failure to do so MAY cause

piping to break, pump to fail, etc; all of which CAN result in property damage and/or personal injury.

All suction connections must be airtight. if the pump won't prime, check for leaks in the suction piping or fittings. If flexible suction hose is used instead of pipe, use reinforced hose with a two inch inner diameter. Non-reinforced flexible hose may collapse from the vacuum created as the pump primes.

Always use a strainer at the end of the suction pipe or hose. Position strainer so it doesn't become clogged with stones or debris. A suction line check valve is recommended. Do NOT use this pump for suction lifts over twenty-five feet.

#### **MAINTENANCE**

Always shut off the engine, allow the engine to cool, and remove the spark plug before performing any maintenance.

During freezing weather, open the drain port and allow the water in the pump to drain. This will prevent damage to the pump when the water freezes, if the pump will be stored for a month or more, drain the water from the pump and follow the engine manufacturer's recommendations for long-term storage.

The Honda engine is equipped with a low oil shut off sensor. The SP CK will shut down and will not restart if the oil level becomes low.

#### PERFORMANCE INFORMATION

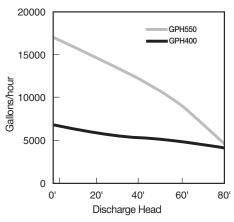
#### Semi-Trash Pump Performance GAS PERFORMANCE

Model	Discharge Head	HP	0'	20'	40'	60'
GPH400	Gallons/Hour		9600	9000	7800	5300
GPH550	Gallons/Hour	5-1/2				9000

#### FEET FRICTION LOSS IN 100 FEET OF PLASTIC PIPE **Gallons Per Minute**

Pipe Size	20	25	30	40	50	60	80	100	120
1 1/4	5.6	8.5	11.9	20.2	30.5				
1 1/2	2.6	4.0	5.5	9.4	14.3	19.9	34.2		
2		1.2	1.6	2.8	4.2	5.8	9.9	15.0	21.2
2 1/2				1.2	1.8	2.5	4.2	6.3	8.8

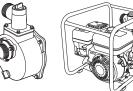
#### Gas Performance



#### For Pump Accessories, call 1-800-237-0987

- Please provide following information:
   Model number
- Serial number (if any)
- Part description and number as shown

Address parts correspondence to: WAYNE Water Systems 101 Production Ďrive Harrison, OH 45030









400 PUMP

4HP HONDA OHV GPH400

**550 PUMP** 

OHV GPH550



3" HOSE KIT 62025-WYN1 2" HOSE KIT 62005-WYN1

#### For Pump Accessories, call 1-800-237-0987

Please provide following information:
- Model number
- Serial number (if any)
- Part description and number as shown

Address parts correspondence to: WAYNE Water Systems 101 Production Drive Harrison, OH 45030



## SUCTION HOSE Part #16510-002

Reinforced to prevent collapse under suction. Hose coupled both ends with 2" hose thread. One 20 ft. hose per carton.



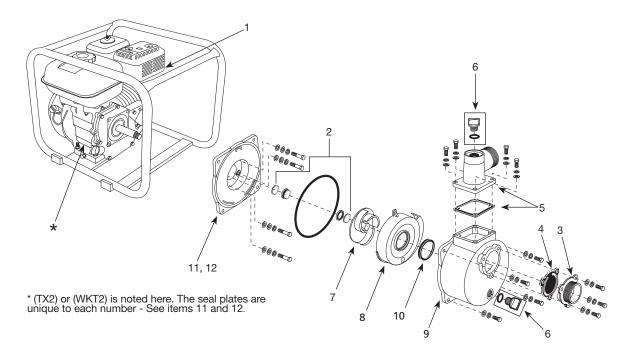
## LAY FLAT DISCHARGE HOSE PART # 16511

Economical, lightweight and resistant to oils, light chemicals, abrasion and sunlight. Will not rot, mildew or absorb water. Hose couples one end with 2" hose thread. One 25 ft. hose per carton.



## 2" SUCTION STRAINER PART # 66036

Prevents stones, leaves and other debris from clogging pump.



Item No.	Part Description	ODI 1400	ODUSEO	01
110.	Bosciipiidii	GPH400	GPH550	Qty
1	Honda Engine	57813-001	57812-001	1
2	Shaft Seal Kit	66048-WYN1	66047-WYN1	1
3	Suction Flange	42008-001	42007-001	1
4	Flapper Check Valve	37307-001	37306-001	1
5	Discharge Flange Kit	66050-WYN1	66049-WYN1	1
6	Drain/Fill Plug	28444-001	28444-001	2
7	Impeller	41021-001	41020-001	1
8	Wear Plate	72030-001	72031-001	1
9	Volute	72032-001	72033-001	1
10	Volute Seal	19051-001	19052-001	1
*11	Seal Plate (TX2)	72027-001	72029-001	1
*12	Seal Plate (WKT2)	72028-001	72034-001	1

#### **Limited Warranty**

For one year from the date of purchase, WAYNE Water Systems Division ("WAYNE") will repair or replace, at its option, for the original purchaser any part or parts of its Water Pumps ("Product") found upon examination by WAYNE to be defective in materials or workmanship. Please call WAYNE (800-237-0987) for instructions or see your dealer. Be prepared to provide the model number and the serial number when exercising this warranty. All transportation charges on Products or parts submitted for repair or replacement must be paid by purchaser.

This Limited Warranty does not cover Products which have been damaged as a result of accident, abuse, misuse, neglect, improper application, improper maintenance, or failure to operate in accordance with WAYNEs' written instructions.

THERE IS NO OTHER EXPRESS WARRANTY. IMPLIED WARRANTIES, INCLUDING THOSE OF MER-CHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO ONE YEAR FROM THE DATE OF PURCHASE. THIS IS THE EXCLUSIVE REMEDY AND ANY LIABILITY FOR ANY AND ALL INDIRECT OR CONSEQUENTIAL DAMAGES OR EXPENSES WHATSOEVER IS EXCLUDED.

Some states do not allow limitations on how long an implied warranty lasts, or do not allow the exclusions or limitations of incidental or consequential damages, so the above limitations might not apply to you. This limited warranty gives you specific legal rights, and you may also have other legal rights which vary from state to state.

In no event, whether as a result of breach of contract warranty, tort (including negligence) or otherwise, shall WAYNE or its suppliers be liable for any special, consequential, incidental or penal damages including, but not limited to loss of profit or revenues, loss of use of the products or any associated equipment, damage to associated equipment, cost of capital, cost of substitute products, facilities, services or replacement power, downtime costs, or claims of buyer's customers for such damages.

You **MUST** retain your purchase receipt along with this form. In the event you need to exercise a warranty claim, you **MUST** send a **COPY** of the purchase receipt along with the material or correspondence. Please call WAYNE Pumps (800-237-0987) for return authorization and instructions.

**DO NOT MAIL THIS FORM TO WAYNE.** Use this form only to maintain your records.

MODEL NO	SERIAL NO	DATE					
ATTACH YOUR RECIEPT HERE							
NOTES:							